

**ABSTRACT**

In a magnetic bearing in which a first part (1, 20) is mounted magnetically relative to a second part (3, 10) and the second part (3, 10) has a Type II superconducting material (2) containing an anisotropic crystal or a plurality of grains formed of this anisotropic crystal, this crystal being anisotropic in that the superconducting current flows in current-carrying planes, the first part (1, 20) has a configuration of magnets (1; 6, 7, 8; 11, 12, 13, 14; 30, 31, 32, 34; 50, 51, 52, 53) with which the superconducting material (2) interacts, and the crystal itself or the crystal in the plurality of grains faces the first part (1, 20) with the normals on the current-carrying planes (a-b).

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